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BABS UNSW iGEM Lab Protocol



Procedure	Name		<i>E. Coli</i> transformation				
	Description		Transformation of competent <i>E. Coli</i> cells with a plasmid				
Document	Name	Isabelle Capell-Hattam		Date	2/07/15	Version	1
Requirements	Time		2 hours + Overnight				
	PPE		Gloves, Labcoat				
	Equipment		Pipettes and Tips Ice Bucket Heat Block 1.5 mL tube 37°C shaking incubator Biosafety cabinet Sterile Spreaders 37°C incubator				
	Materials		Competent <i>E. Coli</i> cells Purified plasmid or ligation reaction SOC medium LB Agar plates (with appropriate antibiotics)				
Step 1	Remove competent cells from the -80°C freezer and thaw on ice						
Step 2	Add 30-50 µL of competent cells to a chilled 1.5 mL tube containing 1 µL of purified plasmid (or 2 µL of a ligation reaction)						
Step 3	Leave on ice for 30 minutes						
Step 4	Heat shock at 42 °C for 90 seconds						
Step 5	Leave on ice for 2 minutes						
Step 6	Add 400 µL of SOC						
Step 7	Shake at 37°C for 1 hour						
Step 8	In biosafety cabinet plate the full volume onto an LB agar plate and						

	spread
Step 9	Incubate at 37°C overnight
Notes	
Version History	